DOCUMENT RESUME

ED 434 914 TM 030 143

TITLE	ACT Assessment 1999 Results. National. Summary Report.
INSTITUTION	American Coll. Testing Program, Iowa City, IA.
PUB DATE	1999-00-00
NOTE	12p.; For the 1998 report, see ED 424 305.
PUB TYPE	Numerical/Quantitative Data (110) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Academic Achievement; College Bound Students; *College Entrance Examinations; *Core Curriculum; Course Selection (Students); Ethnic Groups; *High School Students; High Schools; Higher Education; Minority Groups; *Racial Differences; Scores; Tables (Data); *Test Results
IDENTIFIERS	*ACT Assessment

ABSTRACT

This report provides information about the performance of 1998 graduating seniors nationwide in the United States who took the ACT Assessment as sophomores, juniors, or seniors. Caution in applying these results is advised because these ACT-tested seniors may not be representative of the total population of graduating seniors. Information is provided according to the level of high school course work completed. Average scores are reported for students who reported completing a core high school program of recommended courses and for students who did not complete a core program. In general, students who completed a core program tended to earn higher average scores (average composite score of 22.0) than students who did not complete core courses (average composite score of 19.1). This association holds true across racial and ethnic groups. Tables present trends in ACT composite scores for all students and for ethnic groups. (Contains seven tables.) (SLD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 434 914

act

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Patricia Farrant

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ACT Assessment 1999 Results

Summary Report National

TM030143

ACT
Information for Life's Transitions

epas

Center for Educational Planning

BEST COPY AVAILABLE

ACT ASSESSMENT RESULTS

National
1999

This report provides information about the performance of 1999 graduating seniors nationwide who took the ACT Assessment as sophomores, juniors or seniors. As you review and interpret the information please keep the following in mind:

- ACT-tested seniors may not be representative of the total population of graduating seniors.

- This report provides selected information about the nation's ACT-tested graduating seniors. For more details, please refer to the 1999 ACT National High School Profile Report.

Average ACT Scores

National
1999

To help policy-makers gain a better perspective on the association between coursework taken in high school and performance on the ACT Assessment, this report provides information about the graduating class according to level of high school coursework completed. Average scores are reported for 1999 graduating seniors who reported completing a core high school program (a **core or more** program is defined as a typical college preparatory program) and for those who reported not completing a high school core program. (Refer to following page).

The academic preparation a student receives in high school correlates with success in college. ACT research indicates that students who prepare academically by taking a core high school program consistently score higher on the ACT Assessment than those who do not. These same students also earn better grades in college. These facts underscore the value of a strong basic program of study in high school.

Levels of High School Coursework

Core or More

Core or more is defined as a typical college preparatory program including:

- **English (four years or more)**

  One year credit each for English 9, English 10, English 11, English 12

- **Mathematics (three years or more)**

  One year credit each for Algebra 1, Algebra II, Geometry
  One-half year credit each for Trigonometry, Calculus (not Pre-Calculus), other Math courses beyond Algebra II, Computer Math/Computer Science

- **Social Studies (three years or more)**

  One year credit each for American History, World History, American Government
  One-half year credit each for Economics, Geography, Psychology, other History (European, State, etc.)

- **Natural Sciences (three years or more)**

  One year credit each for General/Physical/Earth Science, Biology, Chemistry, Physics

Less Than Core

Less than core refers to a program of studies consisting of fewer courses than those included in core or more.

Average ACT test scores in English, Mathematics, Reading, Science Reasoning, and Composite for 1999 seniors who completed a core curriculum and those who did not are shown in Tables 1 and 2. In general, students who complete core coursework tend to earn higher average scores than students who do not complete core coursework. As Table 2 indicates, this association holds true across racial-ethnic groups. Table 3 shows that regardless of racial-ethnic background, the average Composite score for students who completed core coursework has been consistently higher over the past five years than the average Composite scores of those who did not.

Table 1
Average ACT Scores
By Level of High School Coursework

	Core or More					Less Than Core				
Reference Group	**E**	**M**	**R**	**SR**	**C**	**E**	**M**	**R**	**SR**	**C**
National	21.6	21.8	22.4	21.9	22.0	18.7	18.9	19.8	19.6	19.4

Table 2
Average ACT Scores
By Level of High School Coursework and Racial-Ethnic Group

	Core or More					Less Than Core				
National Reference Group	**E**	**M**	**R**	**SR**	**C**	**E**	**M**	**R**	**SR**	**C**
African-Amer/Black	17.5	17.7	17.9	18.0	17.9	15.0	15.9	16.0	16.4	16.0
Amer Ind/Alas. Nat.	19.8	20.0	20.8	20.5	20.4	16.7	17.1	18.1	18.2	17.6
Caucasian-Amer.	22.4	22.3	23.1	22.5	22.7	19.6	19.4	20.5	20.3	20.1
Mexican-Amer/Chi.	18.7	19.8	19.8	19.7	19.6	16.2	17.3	17.6	17.8	17.4
Asian-Amer/Pac.	21.3	23.8	21.9	21.9	22.3	18.6	21.1	19.4	19.9	19.9
P.R./Cuban/Oth.	20.0	20.7	20.9	20.5	20.7	17.0	17.8	18.3	18.2	17.9

Table 3
Trends in Average ACT Composite Scores Across Five Years
By Level of High School Coursework and Racial-Ethnic Group

National Reference Group	Core or More		Less Than Core	
	N	Composite	N	Composite
All Graduates				
1995	529146	22.0	360925	19.1
1996	542136	22.0	354733	19.2
1997	566141	22.1	361947	19.3
1998	606406	22.1	354306	19.3
1999	6155.5	22.0	367537	19.4
African-American/Black				
1995	48097	18.0	40099	15.9
1996	48321	17.9	38546	15.9
1997	50100	17.9	39696	16.0
1998	56544	17.9	41019	16.0
1999	58410	17.9	42061	16.0
American Indian/Alaskan Native				
1995	5398	20.1	5509	17.4
1996	5655	20.2	5419	17.7
1997	5685	20.4	5414	17.6
1998	5587	20.4	4903	17.7
1999	5332	20.4	4782	17.6
Caucasian-American/White				
1995	388508	22.6	257159	19.8
1996	398962	22.7	251375	19.9
1997	408851	22.8	250763	20.0
1998	444461	22.7	249092	20.0
1999	452100	22.7	260036	20.1
Mexican-American/Chicano				
1995	13435	19.8	10801	17.2
1996	11753	19.8	9438	17.4
1997	11875	19.9	9475	17.4
1998	19028	19.6	14541	17.2
1999	21260	19.6	15753	17.4
Asian-American/Pacific Islander				
1995	19237	22.4	7989	19.5
1996	19685	22.4	7676	19.7
1997	20201	22.5	7834	19.8
1998	22074	22.6	7886	20.0
1999	23017	22.3	8856	19.9
Puerto Rican/Cuban/Other Hispanic				
1995	13585	19.9	9812	17.2
1996	14838	20.0	10462	17.4
1997	15693	20.1	10615	17.4
1998	10732	20.7	5893	17.9
1999	8911	20.7	5002	17.9

Table 4 presents the relationship between average ACT Composite scores and patterns of high school coursework across racial-ethnic groups **and** annual family income levels within each group.

Table 4
Average ACT Composite Scores
By Level of High School Coursework, Racial-Ethnic Group
And Annual Family Income

1999	Annual Family Income					
National	**Less than $18,000**		**$18,000-$35,999**		**$36,000 or more**	
Reference Group	**N**	**Composite**	**N**	**Composite**	**N**	**Composite**
All Graduates						
Total Group	87488	18.4	212120	19.9	563672	21.9
Core	45770	19.4	121929	20.9	371609	22.8
Less than Core	40423	17.2	87882	18.5	187692	20.3
African-American/Black						
Total Group	24681	16.1	33303	16.8	29442	18.3
Core	12916	16.8	19205	17.6	18824	19.1
Less than Core	11509	15.3	13794	15.8	10354	17.0
American Indian/Alaskan Native						
Total Group	1803	17.4	3238	18.5	4140	20.2
Core	745	18.6	1582	19.9	2399	21.4
Less than Core	963	16.6	1527	17.3	1628	18.7
Caucasian-American/White						
Total Group	37860	20.1	133587	20.8	455393	22.2
Core	19487	21.4	76763	21.9	301112	23.0
Less than Core	18042	18.7	55757	19.3	151404	20.5
Mexican-American/Chicano						
Total Group	7644	17.2	12352	18.2	13366	20.1
Core	4067	18.1	6785	19.0	8407	20.9
Less than Core	3521	16.1	5496	17.1	4881	18.7
Asian-American/Pacific Islander						
Total Group	4801	18.8	7949	20.3	15896	23.2
Core	3116	19.5	5473	21.0	11942	23.7
Less than Core	1580	17.4	2329	18.7	3728	21.6
Puerto Rican/Cuban/Other Hispanic						
Total Group	2298	17.6	4227	18.8	5997	21.1
Core	1220	18.7	2541	19.7	4094	21.9
Less than Core	959	16.4	1548	17.2	1747	19.4

Each year ACT collects freshman course grades from hundreds of colleges and universities. Research has shown ACT-tested graduates typically have at least a 50 percent chance of receiving at least a "B" in the courses listed in Table 5 if they obtain the identified ACT score value or higher. The columns in the right side of the table present the percentages of ACT-tested graduates that earned a score at or above the typical cutoff score. For example, of those students who had core or more coursework, 83% had an ACT English score at or above 17.

Table 5
Summary of Course Placement
Cutoff Scores

Course Type	ACT Assessment Test Variable	Typical Cutoff Score	Percent At or Above The Typical Cutoff Score	
			Those with Core Coursework	Those With Less than Core Coursework
English				
Standard Composition	English	17	83	64
Advanced Composition	English	21	57	35
Literature	English	21	57	35
Mathematics				
Elementary Algebra	Mathematics	19	70	43
Intermediate Algebra	Mathematics	22	49	25
College Algebra	Mathematics	23	42	20
Calculus	Mathematics	27	19	8
Science				
Biology	Science Reasoning	24	34	18
Chemistry	Science Reasoning	25	26	13

Academic success at specific colleges/universities depends on many factors, including the selectivity of the institution and the institution's grading practices. Based on the information presented above, the percentage of ACT-tested students who would likely receive at least a "B" in the identified courses is higher for those who completed the recommended core coursework. Students who earn ACT scores below those listed may need additional academic preparation to be successful in these typical college entry level courses.

Table 6 compares percentages of students choosing selected academic majors in 1995, 1997, and 1999. Overall the interest in most majors has been consistent during this period.

Table 6
Percentages Choosing Selected Majors
By Graduation Year and Gender

National Reference Group	Men	Women	Total
Business			
1995	14	12	13
1997	14	11	12
1999	14	11	12
Computer/Information Sciences			
1995	4	1	2
1997	5	2	3
1999	7	2	4
Education			
1995	5	12	9
1997	6	13	10
1999	5	13	9
Engineering			
1995	17	3	9
1997	17	3	9
1999	17	3	9
Health Professions			
1995	13	26	20
1997	12	27	20
1999	10	26	19

Table 7 presents the average ACT Composite scores for various racial-ethnic groups from 1995 to 1999. Trend information is provided for each reference group represented by 500 or more ACT-tested graduates each year. Over this five-year period, the national average ACT Composite score for the total group of graduates, African-Americans, Caucasian-Americans, and Asian-Americans has remained stable for the last three years. American Indian/Alaskan Native scores have increased from 18.6 to 18.9. The improvement in the Puerto Rican/Cuban/Other Hispanic scores was due to a change in racial-ethnic coding in 1998, for this group and Mexican-Americans.

Table 7
Trends in Average ACT Composite Scores

National Reference Group	N	Composite
All Graduates		
1995	945369	20.8
1996	924663	20.9
1997	959301	21.0
1998	995039	21.0
1999	1019053	21.0
African-American/Black		
1995	89155	17.1
1996	87630	17.0
1997	90617	17.1
1998	100537	17.1
1999	103932	17.1
American Indian/Alaskan Native		
1995	11361	18.6
1996	11580	18.8
1997	11509	19.0
1998	11132	19.0
1999	10830	18.9
Caucasian-American/White		
1995	650664	21.5
1996	654377	21.6
1997	663878	21.7
1998	707496	21.7
1999	732025	21.7

...Continued

Continued...

Table 7
Trends in Average ACT Composite Scores

National Reference Group	N	Composite
Mexican-American/Chicano		
1995	24431	18.6
1996	21345	18.7
1997	21511	18.8
1998	34617	18.5
1999	38257	18.6
Asian-American/Pacific Islander		
1995	27784	21.6
1996	27847	21.6
1997	28542	21.7
1998	30988	21.8
1999	33251	21.7
Puerto Rican/Cuban/Other Hispanic		
1995	24054	18.7
1996	25857	18.9
1997	26841	19.0
1998	17500	19.6
1999	15073	19.6

Annual national trends in ACT scores beginning with 1969-70 are available on request.